**Joint Recommendation by the ASEAN-Business Advisory Council, Keidanren, and the Economic Research Institute for ASEAN and East Asia on the Asia Zero Emission Community**

**8 October 2026**

## 1. Introduction

The recent Strait of Hormuz crisis has exposed inadequate preparedness amongst many Asian countries for disruptions in fossil-fuel supplies and underscored the need to strengthen energy security. In addition, as natural disasters such as earthquakes and tsunamis, as well as extreme weather events including heatwaves, cold spells, and heavy rainfall, occur more frequently and increase the likelihood of affecting power grids and fuel-supply infrastructure, there is a growing need to strengthen the resilience of energy systems. Although critical minerals are indispensable for developing and supplying decarbonised products, the intensifying international competition for resources has also heightened the importance of strengthening Japan–ASEAN supply chains for critical minerals and other resources.

Under the leadership of Prime Minister Takaichi, the Government of Japan announced the launch of the Partnership on Wide Energy and Resources Resilience Asia (POWERR Asia) at the AZEC+ Online Meeting on 15 April 2026. The Policy Package for Wide Energy and Resources Resilience through GX, adopted on 26 August likewise calls for strengthening energy resilience through POWERR Asia. It envisages working with Asian countries to build more resilient energy supply and demand structures, including by enhancing energy resilience in importing countries and supporting the transformation of supply and economic structures in oil-producing countries. Japan and ASEAN are also advancing co-operation on the recycling and circular use of e-waste and end-of-life Vehicles (ELV) to strengthen supply chains for critical minerals and other resources.

As the AZEC Advocacy Group, we support government-level efforts to strengthen energy and resource security. Going forward, AZEC – the Asia Zero Emission Community, which seeks to deliver Asia's triple breakthrough through multiple pathways by simultaneously advancing decarbonisation, economic growth, and energy security – should be further strengthened and evolved. As part of a growth strategy, it should also promote more resilient energy and resource supply chains.

Considering these challenges, we make the following recommendations.

## 2. Challenges to Be Addressed

### 2.1 Energy Resilience

- Since almost 90% of the crude oil transiting the Strait of Hormuz is destined for Asia, the recent Hormuz crisis has significantly affected stable energy supplies in many Asian countries, bringing the need to strengthen energy security into sharp focus. Governments of AZEC partner countries should pursue the following measures to enhance energy resilience. In doing so, they must continue to give due regard to the S+3E balance amongst safety, energy security, economic efficiency, and environmental sustainability in their regular energy policies.

#### (1) Diversifying Energy Sources to Reduce Dependence on Fossil Fuels

- Many AZEC partner countries are resource-poor. As they seek to reduce dependence on fossil fuels, achieve carbon neutrality, and build more resilient energy supply and demand systems, they should diversify their energy sources while taking account of their respective national circumstances and feasible pathways for achieving these objectives. In light of the recent Strait of Hormuz crisis, governments should also work to ensure stable supplies of oil and natural gas during the transition period and strengthen the resilience of related supply chains.
- For AZEC partner countries, where strong economic growth and continued increases in energy demand are expected, a complete break from fossil fuels overnight is neither realistic nor practical. It is essential to make steady progress along diverse pathways tailored to national circumstances, reducing CO2 emissions immediately through more efficient and lower-carbon fossil fuel use, CCUS deployment, and other available measures.
- Governments should improve investment predictability and create an environment conducive to securing finance, for example by developing road maps for the phased reduction of dependence on fossil fuels. At the same time, they should clarify policy directions for ensuring stable supplies of oil and natural gas and strengthening supply-chain resilience during the transition period.

① **LNG**: Given its comparatively low CO2 emissions from combustion and its lower dependence on the Strait of Hormuz compared with crude oil, LNG can play an important role during the transition. In addition, co-firing hydrogen is expected to further reduce CO2 emissions.

② **Coal**: Existing coal-fired power plants will need to be used while reducing CO2 emissions through higher efficiency, co-firing with ammonia, the use of CCUS, and other measures.

③ **Carbon-neutral fuels**: It is also important to expand the use of carbon-neutral fuels - including hydrogen and ammonia, synthetic fuels (e-fuels), synthetic methane (e-methane), biofuels, and sustainable aviation fuel (SAF) - as well as waste-to-energy, to meet demand for clean heat. Cost competitiveness remains a challenge to commercialisation and deployment. International standardisation should be advanced, while a suitable mix of financial support and regulatory measures should be used to accelerate demonstration of mass-production technologies that can deliver these fuels at low cost.
Regarding biofuels in particular, securing feedstock remains challenging, and therefore, investment in infrastructure and logistics is needed to enhance cost competitiveness. In addition, institutional frameworks that provide investment

incentives, including standards for disclosure of emissions reductions achieved through the use of biofuels should be established and reviewed periodically. Furthermore, to break the current market stagnation caused by both suppliers and users waiting for improvements in the business environment, social implementation should be accelerated through cross-industry initiatives and international consensus-building.

④ **Decarbonised power sources**: As AI and other digital technologies drive higher electricity demand, developing and deploying decarbonised power sources such as nuclear power and renewables is also essential. As related technologies mature, perovskite solar cells, next-generation geothermal power, and eventually small modular reactors (SMRs) – one type of next-generation advanced reactor – are expected to play an important role.

**(2) Developing the Foundations for Energy Diversification**

① **Development and deployment of storage batteries and transmission grids**: Renewable energy offers great potential as a decarbonised power source, but its variability and geographic concentration create challenges, including securing balancing capacity, reinforcing transmission and distribution grids, and other measures. It is important to develop and deploy storage batteries and reinforce grid infrastructure.

In particular, to expand cross-border trade in renewable electricity, the ASEAN Power Grid should be developed. Efforts should also be made to enhance the resilience, flexibility, and digitalisation of power grids.

② **Strengthening government-led oil stockpiling systems:** A key lesson from the Hormuz crisis is the importance of creating and maintaining government-led stockpiling systems for crude oil and other petroleum products as part of national crisis-management arrangements. Japan has operated its petroleum stockpiling system reliably for nearly 50 years and should actively assist Asian countries and others in establishing comparable systems, providing support in both hard and soft infrastructure. The use of green steel should also be considered in constructing storage tanks and related facilities.

**(3) Promoting Energy Efficiency**

- To achieve Asia's triple breakthrough through diverse pathways – the simultaneous realisation of decarbonisation, economic growth, and energy security – strengthening demand-side resilience is as important as enhancing supply-side resilience. Above all, sustained efforts to improve energy efficiency are indispensable. Alongside the development and introduction of energy-efficient facilities and equipment, energy management systems should be introduced. Governments should consider market-based incentives, appropriately combined with fiscal support and regulatory measures, as well as the harmonisation of energy-efficiency standards and certification within AZEC.

## 2.2 Strengthening Resource Security

- From the standpoint of achieving carbon neutrality, demand is rising for critical minerals needed to manufacture storage batteries, motors, semiconductors, and other products. However, mines capable of producing such minerals are geographically concentrated, as are smelting, separation, and refining

processes. Securing stable supplies is therefore an urgent challenge. In addition, as global competition for resource acquisition intensifies, the extraction of critical minerals from primary resources is becoming increasingly challenging.

- It is necessary to avoid excessive dependence on particular countries and to strengthen supply chains within AZEC for critical minerals and for decarbonised products and other goods that contain them.

### (1) Securing Primary Critical Mineral Resources

- To secure supplies of critical minerals and other resources, it is necessary to promote joint exploration, processing, and refining within AZEC and to develop substitutes. Strategic partnerships should also be strengthened through joint investment, technology co-operation, and capacity-building programmes.

### (2) Strengthening International Resource-Circulation Networks

- As international competition for resources intensifies and global momentum grows for the circular economy and stronger resource security, secondary resources, including minerals, must be fully utilised through co-operation amongst like-minded countries. Cost reductions through economies of scale and government support measures are also essential. Within the AZEC region, partners should establish resource-recovery schemes to efficiently collect and treat E-waste – such as waste printed circuit boards and used storage batteries containing metal resources, including critical minerals – as well as ELVs and EV batteries, and recycle them at smelting and other facilities. Japan has more than 25 years of experience in building a sound material-cycle society, including through the promotion of the 3R (Reduce, Reuse, and Recycle). Japan can leverage this experience by serving as a regional hub: Assisting AZEC partner countries in establishing institutions, including legislation for environmentally sound treatment; developing technologies and capacity; and promoting private-sector collaboration and investment in resource-circulation industries. Environmentally sound recycling and the recovery of critical minerals and other resources will also contribute to decarbonising supply chains.
- To promote the use of recycled materials, it is essential to raise consumer awareness to encourage the active adoption of products containing recycled materials, while expanding public procurement of such products. At the same time, incentive mechanisms, including product labeling for circular economy products, should also be considered.

## 2.3 Creating an Enabling Environment for Market Development

### (1) Promoting Transition Finance and Green Investment

- AZEC partner countries offer significant potential for investment in low-carbon and decarbonisation initiatives and the circular economy. However, political, currency, and contract-enforcement risks, together with low expected returns and high credit risks, remain major barriers. Improving the predictability of investment returns and establishing credible, reliable approaches to assessing project eligibility are therefore critical.
- To promote transition finance and green investment, the use of blended finance and risk-mitigation instruments should be expanded. It is also necessary to

develop financing frameworks that support emissions-reduction efforts in hard-to-abate sectors and to strengthen collaboration amongst bilateral development banks and agencies, multilateral development banks, export credit agencies, and private financial institutions.

- At the same time, harmonising GHG accounting, MRV, and disclosure standards is essential. Reliable GHG data provides a foundation for companies and governments to take emissions-reduction measures. Calculation rules that vary under national laws and regulations should therefore be harmonised.

**(2) Promoting Cross-border Market Mechanisms Consistent with Article 6 of the Paris Agreement**

- The Joint Crediting Mechanism (JCM) enables Japan and partner countries to share emission reductions achieved by disseminating Japan's decarbonisation technologies, products, services, systems, and infrastructure and by implementing mitigation measures. It can support achievement of the NDCs of both Japan and partner countries. To facilitate the development and implementation of JCM projects, parties should establish common procedural rules and ensure that approval and issuance processes are streamlined and transparent.

**(3) Developing Specialised Talent**

- Developing specialised talent across industry, government, and academia is also essential to advancing energy and resource resilience. Capacity-building programmes and personnel exchanges should be promoted.

## 3. Conclusion

The vision of AZEC - achieving a triple breakthrough in decarbonization, economic growth, and energy security – is becoming more important than ever. Partner countries must continue to work toward their realisation.

At the same time, partner countries should work together to strengthen energy and resource security in response to vulnerabilities exposed by the Hormuz crisis and other developments. This will create business opportunities in green technologies and products and, through their deployment across the AZEC region, help drive energy-system transformation and economic growth.

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